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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,467	12/08/2005	Alexander Mark Heming	70193	3579

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Syngenta Corp Protection, Inc.  
410 Swing Road  
Greensboro, NC 27409

EXAMINER
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KAUCHER, MARK S

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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03/15/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,467	<b>Applicant(s)</b> HEMING ET AL.	
	<b>Examiner</b> MARK S. KAUCHER	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1/22/10.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 22-42 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-32 and 34-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1 and 22-42 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. All outstanding objections and rejections made in the previous Office Action, and not repeated below, are hereby withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 1/22/10. In particular, claim 34 has been amended to depend upon claim 25 (previously depended on a withdrawn claim).

The newly introduced limitations and/or the new claims were not present at the time of the preceding action. For this reason, the present action is properly made final.

***Election/Restrictions***

4. This application contains claims 1 and 33 drawn to an invention nonelected with traverse in the reply filed on 08/10/09. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
5. In light of the amendment, claim 34, previously withdrawn from consideration as a result of a election of species, is hereby rejoined and fully examined for patentability under 37 CFR 1.104. Specifically claim 34 has been amended to depend upon elected

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claim 25 (previously depended on withdrawn claim 33). Thus, amended claim 34 currently reads on the elected species. See paragraph 4 of the previous office action mailed 10/22/09 for more details. Also see the restriction requirement mailed 06/17/09.

### ***Specification***

6. The disclosure is objected to because of the following informalities:
- Page 23, line 30 contains the word “hydrochloride”, which appears to be a misspelling of hydrochloride”.

Appropriate correction is required.

*Note that this objection was present in the previous office action mailed 10/22/09 (see paragraph 5).*

### ***Claim Rejections - 35 USC § 102***

7. Claims 22-32 and 34-42 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7,199,185 (herein “Heming”).

*The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.*

The rejection is adequately set forth in paragraphs 11-18 of the Office Action mailed 10/22/09 and is incorporated here by reference.

8. As to amended claim 34, example 4 discloses a polymer wherein e is about 0.4.

9. As to the amendments to overcome the 112 rejections, the rejections are maintained, since the rejections (with respect to claims 35 and 36) previously addressed the limitations.

***Claim Rejections - 35 USC § 103***

10. Claims 22-32, 34 and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,262,152 (herein "Fryd").

The rejection is adequately set forth in paragraphs 19-25 of the Office Action mailed 10/22/09 and is incorporated here by reference.

11. As to amended claim 34, example 4 discloses a polymer wherein e is about 0.4.

12. Claims 27 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,262,152 (herein "Fryd") in view of Jankova et al. Macromolecules, 1998, 31, 538-541 (herein "Jankova").

The rejection is adequately set forth in paragraphs 19-25 of the Office Action mailed 10/22/09 and is incorporated here by reference.

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13. As to the amendments to overcome the 112 rejections, the rejections are maintained, since the rejections (with respect to claims 35 and 36) previously addressed the limitations.

### ***Double Patenting***

14. Claims 22-32 and 35-42 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 23 and 24 of U.S. Patent No. 7,199,185.

The rejection is adequately set forth in paragraphs 19-25 of the Office Action mailed 10/22/09 and is incorporated here by reference.

15. As to amended claim 34, example 4 discloses a polymer wherein  $e$  is about 0.05-0.4.

16. As to the amendments to overcome the 112 rejections, the rejections are maintained, since the rejections (with respect to claims 35 and 36) previously addressed the limitations.

### ***Response to Amendment***

17. The amendments to the specification are noted, which corrects for typos and other errors that were pointed out in the previous office action. Note that the objections have been withdrawn (with the exception of the objection in paragraph 6 above).

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18. It is also noted that claim 36 has been amended for the typographical error. The objection has been withdrawn.

19. The amendments are noted, which overcome the 35 U.S.C. 112, 2nd paragraph rejections. Note that the 35 U.S.C. 112, 2nd paragraph rejections have been withdrawn.

### ***Response to Arguments***

20. Applicant's arguments filed 1/22/10 have been fully considered but they are not persuasive.

21. *Applicant argues that copending claims 23 and 24 of US patent 7,199,185 (arguments towards the ODP rejection and the rejection under 35 U.S.C. 102(e) appear identical) are directed towards emulsions, while the instant invention is directed towards suspensions.* However, this is not found persuasive. The emulsions and suspensions contain identical dispersants and solids. Furthermore, the examples use both emulsions and suspensions interchangeably. Additionally, claim 18 teaches suspended solids. Finally, copending claim 11 is directed towards suspensions.

22. *The 103(c) statement is acknowledged (last paragraph of page 18).* However, the statement is persuasive towards rejections under 35 U.S.C 103(a) using 102(e) prior

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art. See MPEP 2146. Heming is used as prior art in a 35 U.S.C. 102(e) rejection. Thus, the statement is not persuasive to exclude the reference as prior art. Applicant's attention is directed towards paragraph 12 of the previous office action mailed 1/22/09, which lists ways to overcome a rejection under 35 U.S.C. 102(e). Also see MPEP 2136.05.

23. *Applicant argues that Fryd is silent on the ratio of polymer to solid.* The examiner acknowledges that the prior art is silent to the specific ratio, however, as stated in the previous office action, Fryd teaches the amount of particle (solid) "is not critical to the invention and can be as desired for the end use application" (3:28-35). Furthermore, Fryd teaches that the polymeric dispersant (polymer) is used to control the dispersability of the solid (3:36-45). Thus, it is clear that the polymer and solid are result effective variables, and "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Also see MPEP 2144.05.

24. *Applicant argues that only the background of Fryd discusses agrochemicals.* The examiner disagrees. Specifically, see 3:3-35, which discloses that agrochemicals may be used.

25. Applicant argues that Jankova is not directed towards particulate suspensions or the weight ratio, thus is not applicable. The examiner disagrees. Jankova teaches a



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way of polymerizing amphiphilic polymers (polymers comprising both hydrophobic and hydrophilic polymers). Both Fryd and the instant invention is directed towards amphiphilic polymers (dispersants, polymer, polymeric dispersant). Therefore, the prior art is directed towards the same general art and towards the same generic problem (preparation of amphiphilic polymers).

### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- EP 0,007,731 discloses substantially overlapping subject matter. See examples. Specifically, see example 2 (table 1) which teaches the use of a dispersant containing hydrophobic and hydrophilic groups and an agrochemical (ethirimol). The ratio of polymer to solid is less than 1 to 5 by weight.

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK S. KAUCHER whose telephone number is (571) 270-7340. The examiner can normally be reached on Monday to Thursday, 8:00 AM to 7:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S. Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/MARK S KAUCHER/  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796